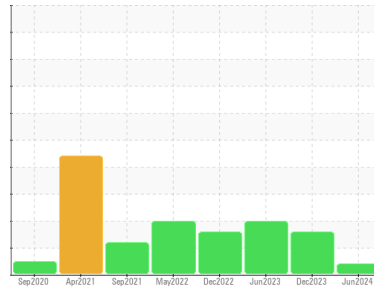




# OIL ANALYSIS REPORT

Sample Rating Trend



**VIS DEBRIS**



Machine Id  
**KAESER SK 20 7213919 (S/N 1405)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- QTS)**

**DIAGNOSIS**

**Recommendation**

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

**Wear**

All component wear rates are normal.

**Contamination**

Moderate concentration of visible dirt/debris present in the oil.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KC131540</b>	KC122058	KC120602
Sample Date	Client Info		<b>07 Jun 2024</b>	07 Dec 2023	19 Jun 2023
Machine Age	hrs	Client Info	<b>7975</b>	6810	5803
Oil Age	hrs	Client Info	<b>2172</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>1</b>	<1	<1
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>3</b>	2	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>12</b>	7	9
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>34</b>	41	7
Calcium	ppm	ASTM D5185m 2	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	32	<1
Zinc	ppm	ASTM D5185m	<b>33</b>	17	21

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>1</b>	0	0
Sodium	ppm	ASTM D5185m	<b>8</b>	16	1
Potassium	ppm	ASTM D5185m >20	<b>4</b>	4	0
Water	%	ASTM D6304 >0.05	<b>0.023</b>	0.021	0.007
ppm Water	ppm	ASTM D6304 >500	<b>231</b>	218	77.9

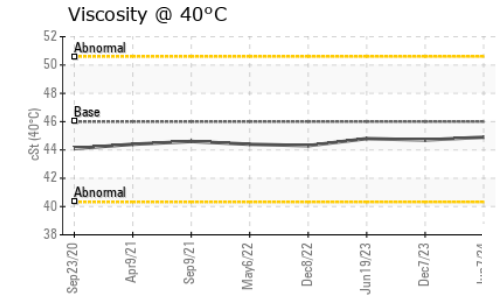
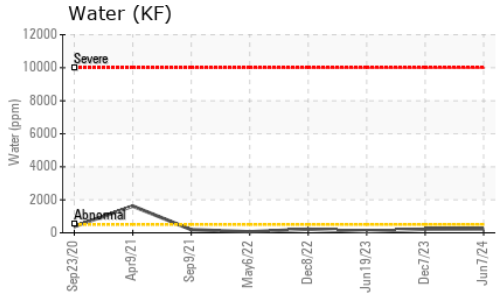
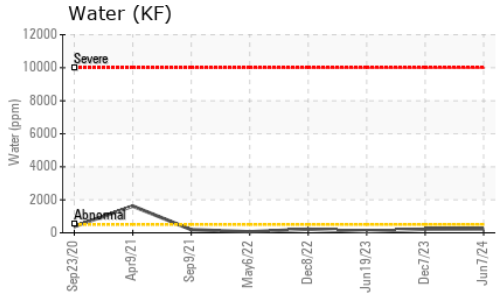
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	10648	116949
Particles >6µm	ASTM D7647	>1300	---	▲ 2728	▲ 43764
Particles >14µm	ASTM D7647	>80	---	▲ 213	▲ 2981
Particles >21µm	ASTM D7647	>20	---	▲ 67	▲ 717
Particles >38µm	ASTM D7647	>4	---	3	▲ 34
Particles >71µm	ASTM D7647	>3	---	0	1
Oil Cleanliness	ISO 4406 (c)	>17/13	---	▲ 19/15	▲ 23/19

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.33</b>	0.31	0.32

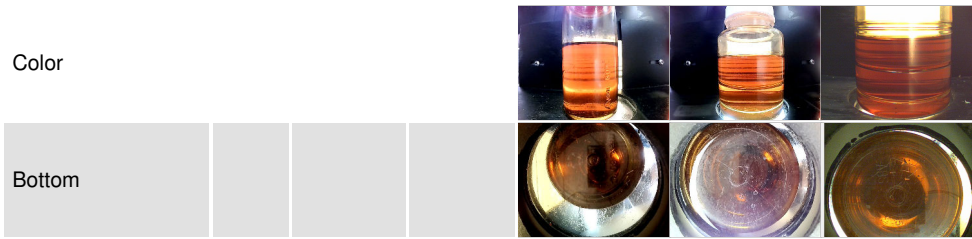
# OIL ANALYSIS REPORT



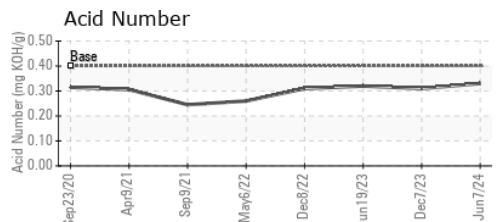
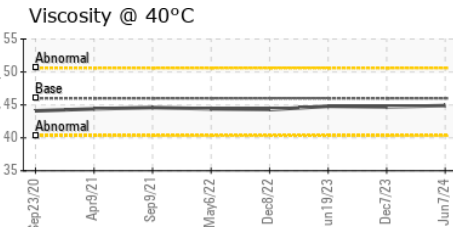
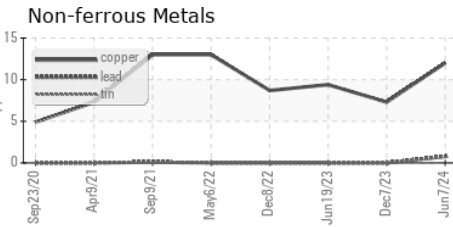
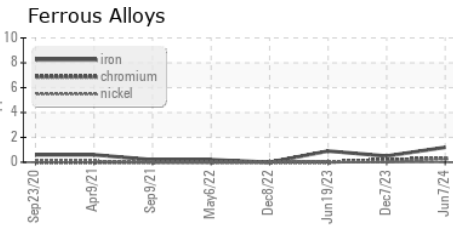
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.9	44.7	44.8

**SAMPLE IMAGES**



**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC131540  
**Lab Number** : 06217313  
**Unique Number** : 11090177  
**Test Package** : IND 2  
**Received** : 21 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Don Baldrige

**BONITA SPRINGS UTILITIES INC**  
 11550 OPERATIONS WAY  
 BONITA SPRINGS, FL  
 US 34135  
 Contact:

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)